

from DEQ

Golden Sunlight Mine

EXHIBIT 8
DATE 3/23/11
SB 306

Location: near Whitehall, MT

Owner: Placer Dome Inc., Vancouver, BC, Canada

Period of operation: 1974 - present

Method of operation: open-pit cyanide vat-leach

Leaks and Spills:

- In 1983, 19 million gallons of cyanide solution leaked when a tailings impoundment failed. The resulting ground water contamination affected the Jefferson River alluvium. Three domestic wells and a veterinary clinic well were contaminated. Neighboring landowners filed suit against the company. In 1989, six years after the spill, the domestic wells were still contaminated with cyanide. The company eventually bought out the neighboring properties. The ground water near the Golden Sunlight mine remains contaminated with cyanide. The extent of the contamination is still undetermined.
- In 1986, a pipe-fitting split and discharged approximately 2,000 gallons of cyanide solution.
- In 1987, a cyanide slurry spill occurred. Golden Sunlight estimated that the spill included 60 pounds of cyanide contained in a combination of 40 tons of solids and 40 tons of liquid.
- In 1988, a pipeline leak occurred. Approximately 15,000 gallons of mine waste flowed from the emergency spillway of the secondary dam.
- In 1989, a pipeline blockage caused acid mine drainage to discharge onto the ground.
- In 1992, ground water monitoring wells revealed cyanide levels far exceeding the human health standard of 0.2 ppm. The eastside pumpback wells contained 250-300 ppm cyanide. The south pumpback wells contained 100 ppm cyanide.
- In 1993, a 7 gallon per minute seep was discovered in a drainage area below the tailings impoundment. Cyanide levels in the seep were measured at 0.6 ppm (3 times human health standard). Another seep was found further down the drainage.

Golden Sunlight Mine (continued)

- In 1994, 48.3 tons of tailings were spilled due to a leak in the spare tailing line. State agencies were not notified until many months after the event. A notice of noncompliance was issued to the company for failure to notify the State of the spill and conduct required clean-up procedures.

Reclamation Status: still operating

The current incarnation of Golden Sunlight was permitted in 1981. A massive expansion of the mine in 1997 triggered a bond of \$38 million. A review of the reclamation bond by the State more recently showed that it needs to be increased by tens of millions of dollars more.

An EIS is currently being written to determine the best way to partially backfill the Golden Sunlight pit. Because of legislation passed in 2003, DEQ is unable to request an increased bond until the EIS is finished. The mine continues to operate with an inadequate bond.

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SECTION TWO:

Detailed listing of impacts for selected mines

Zortman/Landusky Mines

Location: south of the Fort Belknap Reservation, MT

Former owner: Pegasus Gold Corp., Vancouver, BC, Canada

Period of operation: 1979-1997

Method of operation: open-pit, cyanide heap-leach

Leaks and Spills:

- In 1982, 50,000 gallons of cyanide spilled into Alder Gulch contaminating Zortman's community water supply. Pegasus was required to replace the drinking water source.
- In 1985, a leach pad suffered mass movement resulting in a cyanide spill. One month later a 50' x 100' containment pond was built to capture further leakage.
- In 1986, a storm caused Pegasus to spray its process water on a hillside, resulting in a substantial tree kill. This event involved a nearly catastrophic failure of the pond system.
- In 1987, a Ruby Gulch surface monitoring site yielded trace cyanide caused by two dripping process lines. In 1988 cyanide contamination at Ruby Gulch increased. Cyanide levels were measured at 0.2 mg/l (ten times higher than is safe for aquatic life).
- In 1989, 60,000 cubic feet of leach pad slipped.
- In 1991, surface water monitoring below the heap leach pad revealed water pH levels of 4 (acidic) and sulfate levels of 1,400 mg/l (revealing acid mine drainage). In Ruby Gulch pH levels of 2.6 (highly acidic) and sulfate levels up to 3,500 mg/l were measured. In Rock Creek pH levels of 3.5 were measured.

Zortman/Landusky Mines (continued)

- In 1992, a cyanide leak occurred due to a pipeline failure, causing ground water contamination. Maximum contaminant levels for arsenic, cadmium, chromium and copper were exceeded in Ruby Gulch. Significant deterioration of water quality also occurred in Mill Gulch. In 1986, pH levels in Mill Gulch were measured at 7 and sulfate concentrations were measured 8 ppm. By 1991, the pH levels had dropped to 4.1 (indicating acidity) and sulfate concentrations were 1,719 ppm.
- In 1993, the Department of State Lands issued a notice of noncompliance to Pegasus for cyanide contamination due to an improperly installed liner and underliner failure. Inspection reports indicate that between 5,000 and 10,000 gallons of cyanide solution were released and entered the fractured bedrock aquifer. Ground water monitoring wells revealed cyanide at levels exceeding human health standards.
- A notice of noncompliance was also issued for illegally disposing of sulfide waste.
- A Department of State Lands report concluded that there was acid mine drainage in Ruby Gulch and Alder Gulch; two drainages emanating from the mine.
- In 1993, the U.S. Bureau of Land Management issued a notice of noncompliance to Zortman/Landusky for improperly constructing 1,000 feet of road in the Alder Gulch drainage. Zortman placed fill in a stream channel, on side slopes, and in and above the stream.
- In 1993, the U.S. Environmental Protection Agency noted the following violations: leach pad under drains discharging to Montana Gulch; Gold Bug adit discharging to Montana Gulch; Mill Gulch waste dump discharging to Rock Creek; and seepage from the Alder Gulch waste dump discharging to Carter Gulch.
- An environmental impact statement completed in 1996 concluded that the upper reaches of Carter Draw, Alder Spur, and Ruby Gulch had elevated concentrations of sulfate, total dissolved solids (TDS), metals, nitrates, and occasional detections of cyanide. This water failed to meet aquatic life standards and human health criteria, and was being captured and treated before being discharged to Ruby Gulch. The lower reaches of Alder Gulch and Ruby Gulch show a record of being significantly impacted by acid rock drainage or process chemicals. The diversion of recharge from approximately 89 acres of King Creek catchment area into the Landusky pits was considered significant as it makes up approximately 13% of the King Creek drainage above the confluence with South Bighorn Creek.

Zortman/Landusky Mines (continued)

- In 1997, water quality violations at the Zortman/Landusky mines culminated in a \$37 million lawsuit settlement against the company. Pegasus filed for bankruptcy in 1998. The Department of Environmental Quality has determined that the reclamation bond is inadequate, and has asked the bankruptcy court to increase the bond from \$30 million to \$38.5 million.

Reclamation status: incomplete

When Pegasus declared bankruptcy in 1998, the State redeemed Pegasus' \$30 million reclamation bond for the mine. In 2002, a new comprehensive reclamation plan was produced that estimated full reclamation would cost \$33.5 million, approximately \$22.5 million more than remained from the bond. So far DEQ has received \$5 million from the U.S. BLM and has stretched the existing funds to try and complete the reclamation work. Regardless, another \$15-\$20 million is needed to operate the mine's water treatment plants...forever.

According to the U.S. BLM, drainage from the mine contains arsenic, selenium, cyanide, cadmium, copper, nitrates and acids. The volume of pollution from the mine is staggering. Since 1999, over 1 billion gallons of mine drainage have been captured and treated in just one of the water treatment plants and still it is unable to consistently meet State water quality standards. In 2003, the Fort Belknap tribes sued the mine for its continued discharge of toxic pollutants.